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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/507,230

09/09/2004

Rajen M. Patel

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The Dow Chemical Company
P.O. BOX 1967
Midland, MI 48641

EXAMINER

PIERY, MICHAEL T

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

05/27/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,230	Applicant(s) PATEL ET AL.	
	Examiner MICHAEL T. PIERY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 35-53 is/are pending in the application.
- 4a) Of the above claim(s) 1-32 and 36-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33,35 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

In view of the appeal brief filed on January 20, 2010, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is made as set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Christina Johnson/

Supervisory Patent Examiner, Art Unit 1791

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim Rejections - 35 USC § 112

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2. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35 provides for the use of yarn, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

3. Claim 35 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolinger et al. (US 2,919,534) in view of Morman (US 5,116,662) and Smith et al. (US 5,340,902).

Regarding claim 33, Bolinger teaches applying a biasing force to an elastic fiber (column 2, lines 15-18), heating the stretched fiber to a temperature in excess of a temperature at which at least a portion of the crystallites are molten (column 2, lines 20-23), cooling the fiber (column 2, lines 26-27), removing the biasing force from the fiber and heating the fiber above a temperature at which at least a portion of the crystallites are molten without a biasing force such that the length of the fiber is less than the fiber before the heating (column 2, lines 31-36; column 12, line 60-column 13, line 6). Bolinger does not explicitly teach the yarn will recover at least 50% of its stretched length after the first pull and after the fourth pull for four consecutive pulls of 100% strain. The yarn, however, likely possesses this characteristic inherently. Alternatively, Morman teaches elastic fibers are known to recover at least 50% of its length after stretching (Column 1,

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lines 60-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Bolinger to include the fiber of Morman since it has been held that substitution of known equivalent elastic fibers is within routine skill of one in the art (MPEP 2144). Bolinger does not explicitly teach the fibers are melt spun. However, Smith teaches it is well-known to produce fibers by melt-spinning. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Bolinger to use melt spinning to produce the spandex fibers since it has been held that substitution of known equivalent fiber forming methods is within routine skill of one in the art (MPEP 2144).

6. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolinger in view of Morman and Smith, as applied to claim 33 above, and further in view of Kahlisch (US 2,037,513).

The modified Bolinger reference teaches the method of claim 33, as applied above.

Regarding claim 35, Kahlisch teaches it is known to use yarn to make a warp beam (Column 1, lines 3-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the yarn to make a warp beam because warp beams are commonly used to wind finished yarn products.

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolinger et al. (US 2,919,534) in view of Morman (US 5,116,662) and Smith et al. (US 5,340,902), as applied above to claim 33, and further in view of Ibrahim (US 3,325,876).

The modified Bolinger reference teaches the method of claim 33, as applied above.

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Regarding claim 53, Bolinger does not explicitly teach incorporating an inelastic fiber with the elastic fiber. Ibrahim, however, teaches incorporating an inelastic material with the elastic fiber after the heat setting step. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Bolinger to incorporate an inelastic fiber because incorporating the inelastic materials creates yarns with desirable stretch and recovery (column 1, lines 14-20). Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the inelastic material prior to the heat setting step since it has been held that rearrangement of process steps is within routine skill of one in the art.

Response to Arguments

Applicant's arguments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made, as applied above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. PIERY whose telephone number is (571)270-5047. The examiner can normally be reached on M-Th 8:30-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael T Piery/
Examiner, Art Unit 1791

/Christina Johnson/
Supervisory Patent Examiner, Art Unit 1791